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ABSTRACT

This document reviews (1) recent trends in labor force participation and employment among young men, paying specific attention to high school dropouts and minorities because their participation and employment rates have particularly declined; (2) several potential causes for the trends (including a decline in the demand for the labor of these young men and the resulting fall in the wages they are likely to receive) and the empirical evidence for believing them to be causes; (3) evidence on recent trends in participation and employment for different groups of young people; (4) the standard economic model of participation that generates potential causes of these developments; and (5) the empirical literature on demand-side and supply-side causes of participation changes, as well as additional evidence on employment changes for minorities. A final section provides policy implications, suggesting that it may be appropriate to implement policies that discourage dropping out of high school and that raise the demand for labor among the less educated by either enhancing their skills or by lowering their costs to employers. (The document includes 4 tables and 80 references.) (CML)

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21. LABOR FORCE PARTICIPATION AND EMPLOYMENT AMONG YOUNG MEN:
TRENDS, CAUSES, AND POLICY IMPLICATIONS

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21. LABOR FORCE PARTICIPATION AND EMPLOYMENT AMONG YOUNG MEN: TRENDS, CAUSES, AND POLICY IMPLICATIONS

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Introduction

In this paper I will review recent secular trends in labor force participation and employment among young men.¹ Special attention will be paid to specific demographic groups, such as high school dropouts and minorities, whose participation and employment rates have particularly declined.

I will then review several potential causes of these developments, as well as the empirical literature and evidence on these causes. With regards to labor force participation, I will consider factors on both the demand-side and supply-side of the labor market. The former will include evidence on changes in relative and absolute real wages, caused by demographic changes (i.e., Baby Boom/Baby Bust) and changing returns to education. The latter will include the attractiveness of non-market, alternative income sources (e.g., transfer payments, illegal activities, etc.) which affect reservation (i.e., minimum acceptable) wages, as well as the interaction between participation and family/household structure. We will also discuss factors which might affect participation and/or employment rates specifically for minorities.

The rest of the paper will be laid out as follows: Section I presents evidence on recent trends in participation and employment for different groups of young people, while Section II reviews the standard economic model of participation which generates potential causes of

these developments; Section III reviews the empirical literature on demand-side and supply-side causes of participation changes, as well as additional evidence on employment changes for minorities.

In Section IV I conclude and discuss policy implications.

I. Trends in Employment and Participation

In Table 1 we find population levels as well as labor force participation rates, employment-to-population ratios and unemployment rates (for those in the labor force) of young people for selected years between 1955 and 1987. The particular years are chosen to reflect comparable points in the business cycle (so as to consider only secular trends) and to include at least one observation prior to the "Baby Boom/Baby Bust" years.² Separate data are presented for the four race-by-sex groups among young people, as well as for those 16-19 and 20-24.^{3,4}

Several important trends emerge from Table 1. The rapid growth in the population levels of young people shows the effects of the "Baby Boom" between 1964 and 1978 while those for 1987 begin to show effects of the "Baby Bust". Labor force participation trends are quite divergent between males and females in this age group. Young white females show significant increases in participation, while young black females show a slower rise and a growing gap relative to their white counterparts. Among young white males, participation rates increased quite sharply for teens through the late 1960's and 1970's but they have declined significantly since 1978. Among white males aged 20-24, participation has been relatively constant over time. In contrast,

participation for young black males has consistently declined in both age categories since the early 1970's. We also note that employment-to-population ratio changes seem to move fairly consistently with labor force changes. Finally, we note unemployment rate increases for all groups through the 1970's. The increases were largest for blacks and females, and these groups have begun to show some limited improvement (both absolutely and relative to white males) by 1987. Still, unemployment rates of young blacks remain $2\frac{1}{2}$ to 3 times larger than those of young whites, while their participation and employment rates are considerably lower.

In Table 2 we focus more specifically on the labor force participation rates of young people and their relationships to rates of school enrollment. We provide participation and enrollment rates for teens and for those aged 20 through 24, as well as for males and females in each of the years considered in Table 1.

The results show that since 1964, school enrollment has declined for all groups except females aged 20 through 24. As the non-enrolled have higher participation rates than do the enrolled, these trends alone should tend to raise overall participation rates of young people. Among the enrolled, participation rates of both males and females have generally risen since 1964 (though a small decline has occurred for male teens in the 1980's). As for the non-enrolled, participation has generally risen among females and declined among males. The decline among males has been gradual but consistent for those in their twenties, while for non-enrolled male teens the decline has been very sharp since 1978.

Furthermore, the sharp decline among non-enrolled male teens suggests that much of the change involves high school dropouts, who would constitute most of the non-enrolled below the age of 18. More evidence on this issue appears in Table 3, where we find participation rates for young nonenrolled males in 1978 and 1987. The results show that participation rates of high school dropouts declined from 86.5 percent to 76.8 percent between 1978 and 1987 for males aged 16 through 24. Among non-enrolled high school graduates and those with college degrees we find much smaller declines in participation.

It is also particularly disturbing to find nonparticipation growing among those who are not engaged in another productive activity, such as schooling. Both their lack of current employment and their lack of schooling may further inhibit their employment opportunities in future years.

In sum, we find that participation rates among females are generally rising while those among non-enrolled and/or minority males are declining. The declines appear to be most serious for the least educated in these groups.

II. Determinants of Labor Force Participation and Employment - The Theory

The standard economic model of labor supply was developed to explain individual decisions to participate in the labor force as well as their choices of how many hours to work, if they do so at all. Here we focus on the former decision only.

The model posits that individuals are most likely to enter the labor force when: 1) they face high market wages; 2) their nonwage income sources are low; and 3) the value which they place on time relative to income is also low.

The interaction of supply and demand forces at the market level determines the wages which prospective individual workers face in that market. Assuming that individuals can find as much work as they want to at their market wages, these wages would fully reflect the demand for labor which they face in the market. All factors affecting that demand, such as worker skills, firm technologies, etc., would be reflected in these wages.

However, it is quite clear that individuals cannot always find as much work as they want to at their market wages. This is particularly true during recessions, but it may also be true for young workers in prosperous times if wages are not free to adjust to market conditions (because of legally set minimum wages, unions, or employer personnel policies).

In such cases, labor demand will influence individuals' participation decisions through the likelihood of their finding jobs as well as through the wages which they will receive, with both having positive effects on participation. Anything which may limit that demand, including low skills, lack of previous experience, employer discrimination, lack of "contacts" and information in the market, etc., will likely limit participation as well as employment. Recessions, declining industries, and other sources of high local unemployment may also limit participation, though these effects are more ambiguous (for

reasons noted below). All of these forces could thus lead to "discouraged worker" nonparticipation. Furthermore, the effects of minimum wages and unions on participation are also not clear, since they raise wages but lower the individual's employment chances.

As for factors which directly affect workers' own supply decisions, nonwage income is clearly important. Such income generally reflects money and other provisions from spouses and/or parents, and is therefore closely related to housing arrangements and marital status. Thus, young people living at home are less likely to work than are those living on their own, and married women are less likely to work as well. But for young men, marriage may mean more participation rather than less, especially if their spouse's earnings are relatively low and if they feel some responsibility to "provide".

The importance of a spouse's earnings as a form of nonwage income creates another potential effect of recessions or local unemployment on labor force participation. Since the spouse with earnings may suffer unemployment due to these factors, the disappearance of these earnings may induce the non-working spouse to enter the labor market, though perhaps temporarily. This "added worker" effect may counteract the negative "discouraged worker" effect of unemployment noted above.

Other sources of nonwage income may include government transfer programs and illegal activities. Transfer programs such as Aid to Families with Dependent Children (AFDC, or "Welfare"), food stamps, Medicaid, etc. may discourage participation if they are high in value relative to what can be earned in the market. Illegal activities run the gamut from unreported work in the "Underground Economy" (in order to

avoid tax payments) to more serious crimes which provide income. Of course, the decision to choose such sources entails the risks of arrest, conviction, and incarceration which must be balanced against the potential monetary rewards when the choice is made.

The value of time relative to income is closely related to these issues as a determinant of labor force activity. Those who value their leisure time are less likely to work, as are those (usually women) with responsibility for childrearing (or other work in the home). This may be especially true for single mothers. Also, young people enrolled in school are less likely to participate in the labor force; even part-time work may detract from time spent studying, thereby lowering student performance and future earnings as well.

Both nonwage income sources and alternative uses of time help to determine an individual's "reservation wage," i.e., the lowest acceptable wage. It is through the reservation wage that labor supply factors affect individual participation, while labor demand works through the wages and probabilities of employment which individuals face in the market; and it is a comparison of the reservation wage with expected wages (and employment chances) in the market that determines the individual's decision to participate in the market. Finally, the participation (as well as hours of work) decisions of all individuals together determine labor supply in the market which, together with labor demand by firms, result in the overall wage and employment levels which we observe.

III. Participation and Employment of Young Males: The Evidence

In this section we review the empirical literature on the labor force participation of young males (generally defined as those aged 16 through 24), for whom secular declines appear to be occurring. We will review the direct evidence on the determinants of participation, and then consider some possible causes of the trends over time and differences across groups (e.g., blacks and whites) that were noted in Section I above. Because of the potentially close link between employment/unemployment and participation effects noted above, we will include some evidence on the former set of issues as well. We consider labor demand and then labor supply effects separately below.

A. Labor Demand: Wage and Employment Effects

A number of empirical studies have been done which show the effects of labor demand on labor force participation of youth. The classic work of Bowen and Finegan (1969), using data on individuals from the 1960 Census of Population, showed that participation of young males rose with average earnings. Of course, earnings are not observed for those out of the labor force; in this case, they must be either taken from a previous period when the individual did work, statistically imputed, or proxied by other factors. Among proxies, the individual's educational attainment is often used. Bowen and Finegan, and others since then (e.g., Welch (1989)), have found positive effects of such attainment (though not of enrollment) on participation as well.

More recent evidence on the effects of wages on participation of youth confirm these findings. Gustman and Steinmeier (1981), focusing

on those aged 17-22, find positive effects of local youth wages (relative to those of adults) on the participation rates of those not enrolled in school, though their estimated effects are not large.⁵ Williams (1987) focuses on male teens and also finds positive (and somewhat larger) effects of wages for both whites and blacks on transitions into the labor force, while Cain (1987) finds that youth participation rises with family income. Since family income could be a source of nonwage income for young people that would reduce the participation of those from high-income families, the observed positive effects of family income are instead attributed to the higher wages attained by youth from these families. In fact, moving from families with incomes under \$15,000 (1980 dollars) to those at or above \$30,000 we generally see wages rising by about 10 percent and participation rates rising 5-10 percentage points.

The effects of overall (i.e., including adult) local or national unemployment on youth labor force participation also appear to be negative in virtually all studies, thereby suggesting an additional role for labor demand through "discouraged worker" effects. In particular, Freeman finds participation rates of young workers falling 1-2 percentage points for every percentage point rise in the prime-age male unemployment rate.

Bowen and Finegan found negative effects of local unemployment, as do Gustman and Steinmeier, Freeman (1982) and Cain and Finnie (1987). Bowen and Finegan as well as Freeman also considered the effects of various indices of demand for young labor based on local industrial structure. In Freeman's case, the fractions of each industry's

nationwide employment that is accounted for by youth is weighted by the fraction of area employment accounted for by that industry, thus creating an index measuring overall local demand for youth. For Bowen and Finegan as well as Freeman, these indices showed positive and significant effects on participation of young males.

Furthermore, several authors find even larger effects of local demand on the participation of young blacks. In particular, Williams finds larger effects on blacks in both time-series data (using lagged unemployment rates and controlling for trend) and cross-sectional data, which seem to account for substantial fractions of the observed black-white differences in participation of young workers. Cain and Finnie find significant positive effects of the employment of young whites and negative effects of adult black unemployment on the participation of young black males. Gustman and Steinmeier also find effects of local unemployment to be substantially larger for young blacks than young whites, though wage effects are fairly comparable.

A further effect of labor demand on participation of young males might occur though influencing its effect on school enrollment, which we have seen to be negatively correlated with participation. In fact, Gustman and Steinmeier find enrollment to be negatively related to wages and positively to local unemployment, thus moving in the opposite directions from participation. A few authors have also considered the effects of minimum wages on both enrollment and participation. This effect is somewhat ambiguous a priori, since higher minimum wages may also mean higher unemployment for young workers (an issue considered in greater detail below). In fact, Mattila (1978) finds higher enrollments

in years of high minimum wages, while Ehrenberg and Marcus (1982) find negative effects on enrollments for young people from low-income families and positive effects on those from higher-income families. The higher minimum wages thus seem to induce low-income workers to leave school for the labor market while higher-wage workers show an opposite effect.

Declining Wages of Young Men

Since the evidence clearly indicates that labor demand factors play an important role in determining participation rates for both young blacks and whites, we must next consider how changes in demand may have contributed to the observed declines in participation of the nonenrolled and black males in recent years. The labor market for young males has been buffeted by several major demographic and secular economic shifts during this period that should have caused large changes in the demand for particular groups of young males. These changes include: 1) The entrance of the "Baby Boom" cohort into the labor market in the mid-to-late 1960's and 1970's; 2) The subsequent aging of this cohort and the entrance of the "Baby Bust" cohort in the 1980's; 3) The huge growth of the female labor force in the 1960's and 1970's; 4) Shifts in demand away from the manufacturing/heavily unionized sectors towards service/unionized sectors; 5) Dramatic slowdowns in productivity growth; and 6) Changes in enrollment patterns.

There has been convincing evidence for quite some time now that the "Baby Boom" lowered wages and raised unemployment among young workers in the 1970's (Welch (1979), Freeman (1979), Wachter and Kim (1982)).

Given the rise in college enrollment rates of the 1960's, the fall in earnings was largest for college graduates (Freeman (1977), Berger (1983)).⁶ The "Baby Boom" effect appears to have been compounded by the growth of the female labor force, since women seem to be most "substitutable" (or competitive) with young men in the labor market (Grant and Hamermesh (1982)). The substitution seems particularly strong for young black men (Borjas (1986)).

As the "Baby Boom" cohort has aged in the 1980's and has been replaced among youth by the "Baby Bust" group, some of this has changed. In particular, employment prospects and wage levels should improve for the latter group. However, the wage gains appear to be concentrated primarily among college graduates. This has been predicted by some models as a consequence of the "Boom-Bust" phenomenon and the limited scope for substitution between younger and older college graduates, as the skills of the latter became more obsolete (Dooley and Gottschalk (1984), Stapleton and Young (1988)). The falling rate of college enrollments in the 1970's and 1980's (see Table 2) has made the current group of young college graduates even scarcer and high school graduates more plentiful, thus further increasing the gap between them in earnings.

On top of these demographic and enrollment changes have been some larger changes in the economy that reinforce the developments described here. In particular, the relative shifts in demand away from manufacturing and related industries towards the service and financial sectors seem to be further raising the demand for college graduates and lowering them for non-college graduates, though there remains some doubt

about the magnitude of this effect (Murphy and Welch (1988), Bound and Johnson (1989)). Slow productivity growth, industrial relocation towards the South, and the rise of involuntary part-time work among men all appear to have further reduced the relative and real earnings of young, less-educated males (Beach (1988), Levy (1988)).⁷ Finally, declines in unionization rates and the real value of the minimum wage (since it was last increased in 1981) presumably hurt the wages of the young and least educated as well, though their effects on both employment and participation for young workers may be somewhat more positive (Brown et al. (1982), for minimum wages; Holzer (1982) and Montgomery (1989) for unionism).⁸

The net effects of all of these changes on employment and unemployment were seen in Table 1, where improvements for the youngest group by 1987 begin to appear. Some evidence on earnings appears in Table 4. The table shows median income of males for various age groups and education groups in 1972 and 1986. In Part A of the table, we find median income by age group for all those with income during the year and only for those who worked year-round and full-time. The latter measure is in many ways preferable, since it reflects only wage effects rather than employment effects. In Part B, we find median income by education for year-round, full-time workers only. These are presented for all aged 25 and over as well as for the group aged 25 through 34 in each year (data by education are not available for those below age 25). All numbers reported are in 1986 dollars.

The data of Table 4 show clearly declining real incomes for virtually all groups of male workers between 1972 and 1986. For all age

groups combined, the median income reported in 1986 is about 96 percent of that in 1972 for all with income, though it is about 3 percent higher for year-round, full-time workers of all ages. Younger workers show the largest declines between 1972 and 1986. Teens in 1986 earned about 90 percent of their incomes in 1972 and about 96 percent for year-round full-time workers. At least the latter group thus appear to be benefiting from the "Baby Bust" effects. Those aged 20 through 24 in 1986 are making only about 81 percent of their earlier incomes, and about 85 percent for year-round full-time workers. For those aged 25 through 34, the comparable numbers are 87 percent and 92 percent respectively.

The median incomes by education groups (for year-round, full-time workers only) in Part B of the table tell a similar story. Among college graduates, real incomes in 1986 are 98 percent of those in 1972, both for those above age 25 and for those aged 25 through 34. Comparable numbers for high-school graduates are 94 percent and 87 percent, while for those without high-school diplomas the numbers are about 88 percent and 74-81 percent respectively. Clearly, young workers without college degrees and especially those without high-school degrees are facing dramatic declines in their real earnings. The results of Part A of this table suggest that these trends are even stronger for those in their early 20's. Furthermore, the decline in earnings of young blacks relative to young whites that has occurred in the late 1970's and 1980's (Bound and Freeman (1988)) implies that these results could be even more severe if calculated separately for young black males.⁹

All of these results strongly suggest that the observed decline in labor force participation among non-enrolled young males and especially young black males should be at least partly explained by their fall in real earnings (though it is difficult to say with any degree of confidence how much of the observed effect is so explained). The fact that participation, employment and real market wages are all falling also points to the importance of labor demand rather than labor supply shifts in explaining these developments. But the full explanation must also examine alternative uses of time and sources of income for these young people, which we will consider in the section on labor supply below.

Black-White Demand Differences

Before moving to the next section, it may be useful to review a bit more evidence on differences in relative demand facing young blacks and whites. As noted above, the declines in demand caused by growing female labor force participation and other factors appear to have been larger for young blacks than for whites (Borjas (1986)), and in general the demand for young blacks seems to be more sensitive to overall demand conditions. It is at least possible that the decline of manufacturing and unionized employment, on which young blacks have traditionally been more dependent, have hurt them relatively more as well; however, the evidence to date on this issue is very incomplete.¹⁰ Shifting demand from agriculture towards manufacturing appears to have hurt the employment of young, southern blacks between 1950 and 1970 (Cogan

(1982)); changes since then are more ambiguous in their relative effects.

At any point in time, the relatively lower demand faced by young blacks is usually thought to be caused by some combination of lower skills and discrimination. It is clear, for instance, that educational performance as measured by grades has important effects on employment for both young blacks and whites, and that young blacks do less well in such performance measures (Mejer and Wise, 1982b). But it is not clear why either skill or discrimination problems of young blacks should have grown worse in the last two decades. If anything, government Equal Opportunity and Affirmative Action activities appear to have raised the relative demand for black males (Freeman (1980), Leonard (1985)).¹¹ Relative skills as measured by years of education as well as test scores have also converged over time (Smith and Welch, 1987).

It is, however, possible that employer perceptions of less-educated, low income blacks have grown more negative over time because of growing concerns about absenteeism, turnover, crime, vandalism, etc. (Jencks (1987)). High rates of discharge for black youth when they are employed can be at least partly traced to absenteeism and other problems of performance on the job (Jackson and Montgomery (1986), Ferguson and Filer (1986)). It is also possible that the information and "connections" of young blacks in the labor market have diminished because of their growing tendency to live in female-headed, welfare households in which no other adults are employed. We have no direct evidence on changes over time in information or connections. But there is clear evidence that the employment status of

their siblings has significant effects on the employment of young people in general (Rees and Gray (1982)), which therefore reflect some direct family effects. Also, most of the employment problems faced by young blacks occur when searching informally for jobs, i.e., when using friends and relatives for information or applying directly to employers without referrals (Holzer (1987)).

Furthermore, any early difficulties which young blacks face in obtaining employment seem to reproduce themselves in later years. Both Meyer and Wise (1982a,b) and Ellwood (1982) find that the lost labor market experience caused by early unemployment has longer-term negative effects on wages. For younger blacks, (and, to a lesser extent, young whites) this seems to mean lower participation and employment rates in future years. Indeed, Ballen and Freeman (1986) find that the employment rates of inner-city young blacks do not increase with age to the same extent as do those of young whites and blacks more generally. They trace this effect (through employer interviews) at least partly to the poor work histories which many young blacks clearly have as they apply for new jobs. Also, the successive spells of nonemployment which these young blacks experience do not seem to diminish in duration, which implies that many inner-city young blacks are gaining little in the way of useful work experience and/or talents from the jobs which they do obtain.

One final source of demand problems often hypothesized to exist for young blacks is the movement of firms to suburban areas while blacks remain concentrated in inner-city areas. While such movement has clearly occurred over time, there has been conflicting evidence recently

on this question. Some papers suggest that the overall employment effects for young blacks may not be large (Ellwood (1986), Leonard (1987)), while others (Ihlanfeldt and Sjoquist (1989)) find them to be substantial. This issue thus remains a topic of much continuing research and controversy.

B. Labor Supply Effects on Participation and Employment

As noted in Section II, labor supply effects on participation will usually reflect an individual's nonwage income sources and alternative uses of time outside of the labor market, such as in school or in caring for a family. These factors, as well as the general value of income relative to time, will determine the reservation wage of an individual, which is compared to the expected value of the market wage. Our direct evidence on these issues is somewhat mixed and incomplete, especially with regards to changes over time. However, some inferences about their effects is still possible.

With regards to school enrollments, the data are quite clear. As noted above, enrollments for most groups of young workers have declined since the mid-1960's. This decline would be expected on the basis of the falling rates of return to higher education that were experienced during the 1960's and 1970's (Freeman, (1971, 1977)). As the rate of return has risen again in the 1980's, this trend should be reversed. But even as enrollments were declining for most youth, they rose for young blacks between the 1960's and 1980's. This rise (along with rising participation in the military) helps to explain a third or more of the decline in overall civilian participation and employment rates of

young blacks relative to young whites during that time (Mare and Winship (1983), Ellwood and Wise (1983)).

While marriage is generally negatively correlated with labor force participation among women, they are positively correlated for young males (Cain (1987)). Marriage for men seems to imply responsibilities that translate into a higher value of income relative to time (although marriage also seems to have positive effects on wages.) Thus, the falling marriage rates of young males in recent years may have contributed to their lower participation. Furthermore, black young men have significantly lower rates of marriage than do young whites (11 percent and 18 percent of these aged 16 through 24 respectively, according to Cain (1987)). Of course, distinguishing cause from effect is difficult here, since labor market difficulties might also explain low marriage rates (Wilson (1987)).¹²

A related issue involves household structure, since living with parents for young people is negatively related to labor market activity (McElroy, (1985)). With no obvious downward trend in the fraction of young males who live on their own, it is unlikely that this factor contributes to the downward trend in participation for young males. Young blacks do live with their families more frequently than do young whites, but once again the direction of causation is unclear here.

With regards to nonwage income sources, we note that unemployed young males are generally not eligible to directly receive transfer payments such as AFDC unless they are heads of households with children, which the vast majority are not. Lerman (1986) finds that young males living in AFDC households are less likely to be employed than are

comparable youth from non-AFDC homes; but he considers it unlikely that this is due to a high marginal tax rate on their income (i.e., tendency to lose benefits as earned income rises), since most states do not put great emphasis on the earnings of non-heads when calculating benefits. A more general negative effect of such income on participation is also unlikely, since families on AFDC generally are low-income and since family income seems to be positively correlated with participation (as noted above). Freeman (1986) also finds negative effects on employment for black youth in female-headed households or whenever there is no employed adult in the household. Possible interpretations of these results include low (unobserved) skills, lack of connections in the labor market, or lack of work ethic. The potential role of attitudes and work ethic on employment of black youth is also stressed by Datcher-Loury and Loury (1986), though again the potential correlation of expressed attitudes with other individual characteristics makes it difficult to interpret these results exactly.

Another source of nonwage income for young males involves illegal activity, whether it be unreported work in the "Underground Economy" or more serious criminal activity, especially that involving drug trafficking. These factors are likely to be particularly important for young men who are neither enrolled in school nor participating in the regular labor force.

Of course, the very illegal nature of this income makes it very difficult to analyze in survey data on employment and participation. The literature on this issue generally shows negative but weak relationships between crime and employment (Freeman (1983)), and once

again the direction of causation remains in doubt. (i.e., Does weak employment lead to participation in crime or vice-versa?)

For inner-city black youth, Viscusi (1986) finds that an expected gap between income from illegal activity and from market work raises the probability of participating in such activity while higher expected probabilities of arrest and conviction lower such activity. Given that the expected gap between these income sources is likely to be higher for black youth than for whites, it is likely that substitution of illegal activity for market work occurs to a greater extent for them. For young men of both races, prison time is clearly negatively correlated with employment, education, and labor force activity in the 1980 Census (Welch (1989)). The rise in criminal activity over time by the young as reported in official government records also suggests a possible link between crime and declining participation of young males overall.

Another approach to these issues involves the analysis of reservation wages of young males. High reservation wages can potentially cause lengthy durations of unemployment as well as nonparticipation in the labor force; and a great deal more attention has been placed on studying the former in empirical work to date.¹³ Also, the subjective and hypothetical nature of responses to survey questions on reservation wages has led some economists to prefer drawing inferences from (presumably) more reliable data on wages and employment.

With regards to youth, Finis Welch (1989) has recently argued that the observed declines in employment and participation rates of black youths during times when their wages have been rising suggests that their relative reservation wages must have risen substantially during

this period. Analyzing self-reported reservation wages from survey data, Holzer (1986a,b) finds some evidence of comparable reservation wage levels between young blacks and whites and therefore of 10-15 percent higher reservation wages relative to market wages for young blacks. These higher relative reservation wages then appear to explain significant fractions (i.e., up to about 20 percent) of the higher unemployment rates of young black males. Elijah Anderson (1980) also finds evidence of young blacks refusing to accept low-wage employment in interviews conducted among inner-city youth in Philadelphia.¹⁴

As for changes in reservation wages among young males over time, there has been little explicit analysis to date on this issue. Only Kim (1981) has compared self-reported reservation wages for both blacks and whites between the late 1960's and late 1970's/early 1980's, and he finds some evidence of rising reservation wages relative to market wages for both (and especially for young blacks). However, small sample sizes and other statistical problems in this work leave us with some questions on this issue.

To sum up, the evidence reviewed here suggests a potentially important role for illegal income and high reservation wages relative to market wages in explaining the low employment and participation rates of black youth. The evidence on changes over time in these factors for both young blacks and whites is sketchier but still suggests the possibility of a role here as well in explaining falling participation rates over time.

IV. Conclusions and Policy Implications

The evidence presented in the preceding sections of this paper show a decline in labor force participation of nonenrolled young men that has been independent of the business cycle and has been heavily concentrated among blacks and those less educated. Among the potential causes of these developments, a decline in the demand for the labor of these young men (and the resulting fall in the wages they face in the market) seems to have the greatest potential explanatory power. Other factors, such as the greater willingness of young men to remain unmarried and to participate in illegal activities, may be important as well in keeping reservation wages high relative to falling market wages. Potentially positive developments for these youth, such as the small size of the "Baby Bust" cohort that is now entering the labor force, appears to have lowered unemployment rates among young people but has not yet had a large effect on the wages of the less-educated.

It therefore seems as though large-scale economic and demographic forces, as well as the responses of youth to those forces, are driving the observed changes in the labor force. At least to some extent, these forces should generate self-correcting mechanisms over time that will help to alleviate the problems discussed here. For instance, there is some evidence that the wages of less-educated young workers have risen quite substantially recently in various tight local labor markets, such as that of Boston (Freeman (1988)). If economic growth and/or the "Baby Bust" continue to generate tight labor markets in other parts of the country, the implications for the young and less-educated will be quite positive. Furthermore, the currently high rates of return to education

and low returns to high-school dropouts should themselves encourage higher post-secondary school enrollments and lower dropout rates. By changing the relative supplies of young workers with different levels of education, such changes in enrollments will help to equalize wages somewhat across these groups.

But it is also quite unlikely that economic and demographic forces alone will totally resolve these problems. For one thing, a cyclical downturn in the coming years would dampen these developments by reducing the positive effects of demand for the young and less-educated. Furthermore, employment problems of groups such as young black men have steadily worsened (or remained very serious) over time despite major cyclical shifts and other economic changes. Thus new policy responses to combat these developments may be appropriate. Given the apparent causes of the declines in participation, the goals of such policies should be to: 1) Discourage dropping out from high school; and 2) Raise the demand for labor among the less-educated, either by enhancing their skills or by lowering their costs to employers.

1) Education/Training Programs

Of course, these are not particularly new policy goals, and some evidence exists on previous attempts to achieve them. For instance, several experimental employment and training programs for young men have had the goals of enhancing their skills and work experience as well as discouraging their dropping out from school. The Youth Incentive Entitlement Pilot Project (YIEPP) from 1978 through 1981 provided part-time employment during the school-year and full-time employment

during the summer on the condition that the participants remain enrolled. Post-program evaluations (Gueron (1984)) indicated that YIEPP succeeded in raising employment of youth as much as a year afterwards but did not raise wages. Furthermore, high school graduation rates were not significantly higher for program participants. In the more recent Summer Training and Education Program (STEP), developed by Public/Private Ventures in 1984, disadvantaged youth receive part-time work and part-time skills remediation over a few summers and a school-year. Evaluations (Sipe et al. (1988)) show positive effects on participants' performance on standardized tests but only small and statistically insignificant effects on dropout rates.

Thus, these programs seem to show positive effects on various aspects of participant behavior but little success in preventing dropping out. Other approaches to providing dropouts (as well as other low-skilled, nonenrolled people) with basic or employment-related skills may show more promise. These include government-funded "human capital" grants, where low-skill people would receive training vouchers and could choose between a variety of public and private modes of skill acquisition. But there is little in the literature to date which carefully evaluates such ideas.¹⁵

A great deal more evidence exists on what is and is not cost-effective in the realm of more traditional government training programs for disadvantaged workers (e.g., Bassi (1983)). These approaches, as well as more recent attempts to improve the effectiveness of informal job search behavior among these workers, should be considered here as well.¹⁶

2) Wage Subsidies

A different approach to the problem of low-wage workers involves wage subsidies, paid to either employers or employees. If paid to employers, the subsidy would effectively lower the cost of hiring workers and thereby raise employment. If paid to employees, it will raise the income which they receive per wage dollar. At least in theory, payment to employers or to employees should produce comparable outcomes in the labor market. In the latter case, workers would be more willing to accept low-wage jobs than before, thus enabling employers to reduce their costs. But in reality, legal minimum wages and other constraints on the firm's ability to lower wages for specific groups of workers make the two kinds of payments less comparable. The employer subsidy is therefore regarded as a way of generating higher labor demand and the employee subsidy is often thought of as an income supplement. Either by lowering employer costs or by raising the worker's effective wage, both should tend to raise the demand facing workers and therefore their labor force participation.

The relevant question for government policy is whether the amount of net job creation of a subsidy justifies the budgetary cost of the program. The amount of net job creation depends on the elasticity of labor demand, i.e., the sensitivity of firm hiring decisions to their labor costs. The lower this elasticity, the greater the extent to which an employer wage subsidy would simply represent a windfall to employers whose hiring practices do not change and who merely substitute government finances for their own.

An important related question involves the degree to which a subsidy should be "categorical," or targeted on specific groups such as disadvantaged workers (however defined). Targeting reduces the overall costs and lessens the windfall to employers, but it raises the degree to which subsidized workers may displace non-subsidized workers, especially if their skills are comparable. Targeting also has the disadvantage of creating a stigma for eligible workers, since it signals to the employer that these workers have labor market problems in the absence of the subsidy. The stigma may more than fully counteract the benefits in terms of lower employer costs for hiring these workers.

An intermediate strategy involves subsidies only for "marginal" workers, or for any who are hired above some base level of employment. Such a strategy eliminates some of the windfall problem, since only those hired above the base level are subsidized; and it also limits substitution against unsubsidized workers for the same reason. By focusing on the last group of employees to be hired, this policy should also disproportionately benefit less-skilled employees without the stigma of targeting. This last attribute is reinforced if the subsidy is designed to cover a fixed fraction of wage costs up to some total dollar limit, since this will cover a large fraction of total wage costs for low-wage than for high-wage workers.

The federal government has had experience with both "marginal" and targeted subsidies. The New Jobs Tax Credit (NJTC), began in 1977 but discontinued after 1978, paid 50 percent of the first \$6,000 of wages for up to 50 new workers after the firm had reached 102 percent of the previous year's employment. Budgetary costs of the program were under

\$2 billion (1977 dollars), and several studies suggest that employment growth in eligible firms (as well as among those who knew about the program at all) was 2-3 percent higher than in comparable firms (Bishop and Haveman (1979), Wachter and Perloff (1979), Bishop, (1981)).

On the other hand, targeted employer subsidy programs for disadvantaged workers had longer lives but smaller effects. The Work Incentive (WIN) program associated with heads of welfare households and the Targeted Jobs Tax Credit (TJTC) are two such programs. Response rates from firms on both have been low (Hamermesh (1978)). Experimental programs on smaller scales have shown similar results (Burtless (1984)), again suggesting a large stigma effect from targeted subsidies.

What does all of this imply for labor force participation of young people? In local labor markets which are now tight and where upward pressure on wages of youth already exists, there is little point in an employer subsidy program. But in states or metropolitan areas where local demand is slack, a marginal worker subsidy focusing only on less-educated youth might be quite cost-effective in raising employment and participation. Complementing this with an employee subsidy for particularly disadvantaged groups would further enhance the labor force effects but would avoid the stigma problem discussed above. In the event of a cyclical downturn over the next few years, the employer subsidy would be especially timely as a means of combatting labor demand problems which always fall disproportionately on the young and/or less-educated (Clark and Summers, 1981).

It is also important to consider federal minimum wage policy in any discussion of subsidies. If the federal minimum is once again raised in

the next few years, employer subsidies might tend to offset any negative effects on labor demand which might result. The two policies might therefore be seen as being complementary. On the other hand, the additional employee subsidy for disadvantaged worker may be viewed as a more efficient way of raising their earnings than are large minimum wage increases (though it is also more costly for the Federal Treasury).

Finally, we note the important link that may exist between illegally-obtained income and the participation of low-wage workers in inner-city areas. To the extent that more effective law enforcement can make such activity costlier (in terms of expected arrest) and/or less profitable, positive effects on participation might result. But more specific recommendations in this area are clearly beyond the scope of this paper.¹⁷

TABLE 1

POPULATION, LABOR FORCE, AND EMPLOYMENT/UNEMPLOYMENT RATES -
YOUTH AND OTHERS, 1955-87

| <u>Ages 16-19</u> | | | | | | | | |
|-------------------|--------------------|-------------|-----------|-----------|----------------------|-------------|-----------|-----------|
| | <u>White Males</u> | | | | <u>White Females</u> | | | |
| | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> |
| 1955 | 3,507 | .586 | .520 | .113 | 3,785 | .407 | .370 | .091 |
| 1964 | 5,148 | .527 | .450 | .147 | 5,468 | .378 | .322 | .149 |
| 1972 | 6,627 | .601 | .515 | .142 | 6,673 | .481 | .413 | .142 |
| 1978 | 7,022 | .650 | .563 | .135 | 7,038 | .567 | .485 | .144 |
| 1987 | 6,015 | .590 | .499 | .155 | 5,924 | .565 | .490 | .134 |

| <u>Ages 20-24</u> | | | | | | | | |
|-------------------|--------------------|-------------|-----------|-----------|----------------------|-------------|-----------|-----------|
| | <u>White Males</u> | | | | <u>White Females</u> | | | |
| | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> |
| 1955 | --- | --- | --- | --- | --- | --- | --- | --- |
| 1964 | --- | --- | --- | --- | --- | --- | --- | --- |
| 1972 | 978 | .463 | .316 | .317 | 1,040 | .322 | .192 | .405 |
| 1978 | 1,093 | .448 | .285 | .367 | 1,195 | .373 | .221 | .408 |
| 1987 | 1,065 | .436 | .285 | .344 | 1,098 | .396 | .758 | .349 |

| <u>Ages 20-24</u> | | | | | | | | |
|-------------------|--------------------|-------------|-----------|-----------|----------------------|-------------|-----------|-----------|
| | <u>Black Males</u> | | | | <u>Black Females</u> | | | |
| | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> |
| 1955 | 3,074 | .856 | .804 | .070 | 4,720 | .458 | .435 | .051 |
| 1964 | 4,862 | .857 | .793 | .074 | 5,706 | .488 | .454 | .071 |
| 1972 | 7,042 | .843 | .771 | .085 | 7,855 | .594 | .546 | .082 |
| 1978 | 8,335 | .872 | .806 | .076 | 8,704 | .693 | .636 | .083 |
| 1987 | 7,729 | .859 | .796 | .084 | 8,079 | .748 | .693 | .074 |

| <u>Ages 20-24</u> | | | | | | | | |
|-------------------|--------------------|-------------|-----------|-----------|----------------------|-------------|-----------|-----------|
| | <u>Black Males</u> | | | | <u>Black Females</u> | | | |
| | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> | <u>Pop</u> | <u>LFPR</u> | <u>EP</u> | <u>UR</u> |
| 1955 | --- | --- | --- | --- | --- | --- | --- | --- |
| 1964 | --- | --- | --- | --- | --- | --- | --- | --- |
| 1972 | 921 | .826 | .704 | .149 | 1,106 | .571 | .469 | .179 |
| 1978 | 1,120 | .788 | .622 | .210 | 1,363 | .628 | .486 | .227 |
| 1987 | 1,173 | .778 | .621 | .203 | 1,405 | .644 | .493 | .233 |

NOTE: Pop, LFPR, EP and UR refer to Population, Labor Force Participation Rate, Employment-to-Population Ratio, and Unemployment Rate respectively. Sources are the relevant tables of the Handbook of Labor Statistics and Employment and Earnings.

TABLE 2

**SCHOOL ENROLLMENT AND LABOR FORCE PARTICIPATION
RATES OF YOUTH, 1955-1987**

| <u>Ages 16-19</u> | | | | | | |
|-------------------|------------------------------------|----------------------------------|--------------------------------------|------------------------------------|----------------------------------|--------------------------------------|
| | <u>Males</u> | | | <u>Females</u> | | |
| | <u>Fraction</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Non-Enrolled</u> | <u>Fraction</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Non-Enrolled</u> |
| 1955 | .640 | .392 | .929 | .487 | .230 | .581 |
| 1964 | .739 | .335 | .874 | .688 | .233 | .565 |
| 1972 | .718 | .401 | .872 | .652 | .346 | .621 |
| 1978 | .693 | .471 | .886 | .658 | .440 | .693 |
| 1987 | .621 | .433 | .770 | .600 | .442 | .670 |

| <u>Ages 20-24</u> | | | | | | |
|-------------------|------------------------------------|----------------------------------|--------------------------------------|------------------------------------|----------------------------------|--------------------------------------|
| | <u>Males</u> | | | <u>Females</u> | | |
| | <u>Fraction</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Non-Enrolled</u> | <u>Fraction</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Enrolled</u> | <u>LFPR -</u> <u>Non-Enrolled</u> |
| 1955 | .181 | .417 | .917 | .061 | .420 | .486 |
| 1964 | .238 | .480 | .916 | .109 | .378 | .518 |
| 1972 | .277 | .533 | .949 | .161 | .500 | .627 |
| 1978 | .243 | .554 | .946 | .193 | .583 | .721 |
| 1987 | .217 | .568 | .931 | .200 | .608 | .761 |

NOTE: Sources are the same as those of Table 1.

TABLE 3

**PARTICIPATION RATES OF NONENROLLED MALES,
AGES 16-24, BY EDUCATIONAL ATTAINMENT, 1978 AND 1987**

| | <u>1978</u> | <u>1987</u> |
|-----------------------|-------------|-------------|
| < 4 Years High School | .865 | .768 |
| High School Graduates | .954 | .931 |
| 1-3 Years College | .952 | .940 |
| College Graduates | .968 | .967 |

TABLE 4**A. Males' Median Income by Age, 1972-1986**

| <u>1972</u> | <u>All Males</u> | <u>Ages: 16-19*</u> | <u>20-24</u> | <u>25-34</u> |
|-------------------------------|------------------|---------------------|--------------|--------------|
| All with Income | \$17,768 | 2,402 | 11,004 | 21,985 |
| Year-Round, Full-Time Workers | 25,133 | 10,153 | 16,740 | 24,635 |
| <u>1986</u> | | | | |
| All with Income | \$17,114 | 1,928 | 8,961 | 19,162 |
| Year-Round, Full-Time Workers | 25,894 | 9,730 | 14,152 | 22,692 |

*Ages 15-19 in 1986.

Males' Median Income by Education, 1972 and 1986, Year-Round, Full-Time Workers

| <u>1972</u> | <u>8 Years</u> | <u>1-3 Years H.S.</u> | <u>H.S. Grads</u> | <u>1-3 Years College</u> | <u>College Grads</u> |
|-------------|----------------|---------------------------|-------------------|------------------------------|--------------------------|
| Ages 25 + | \$18,753 | 22,567 | 26,409 | 29,641 | 37,559 |
| Ages 25-34 | 16,266 | 19,982 | 23,628 | 26,292 | 30,857 |
| <u>1986</u> | | | | | |
| Ages 25 + | \$16,389 | 20,003 | 24,701 | 28,025 | 36,665 |
| Ages 25-34 | 12,056 | 16,165 | 20,438 | 23,594 | 30,162 |

NOTE: Data are obtained from U.S. Bureau of the Census, Current Population Reports, Series P-60. All figures are in 1986 dollars, with 1972 adjusted by the fixed-weight personal consumption expenditures deflator.

NOTES

¹This paper will not cover the general issue of youth unemployment and why its levels are always higher than those of adults. For discussions of these issues, see Osterman (1980) or Ellwood and Feldstein (1982). Important cyclical effects on the youth market, such as those discussed in Clark and Summers (1981), are also ignored in this discussion of secular trends. Finally, the analysis below assumes that labor force participation is a meaningful and measurable category, thus abstracting from the unemployment/nonemployment issue stressed by Clark and Summers in their other work (1979).

²Unemployment rates for adult males (ages 20 and above) in the five years listed are 3.8, 3.9, 4.0, and 4.2 percent respectively for 1955, 1960, 1972, and 1978. For married males, they are 2.6, 2.8, 2.8, and 2.8 percent respectively.

³Separate rates for blacks in the pre-1972 years by age are not available in the published annual data.

⁴Throughout this paper, "youth" will refer to teens (ages 16-19) and those aged 20-24 unless otherwise indicated.

⁵Gustman and Steinmeier estimate the effects of being in any of four relative (i.e., youth-to-adult) wage categories on joint probabilities of enrollment and participation. They find that moving from the lowest to the highest relative wage category (which more than doubles the relative wage) raises nonenrollment and participation rates of young white males by 7-20 percent (and slightly less for black males), though participation rates conditional on nonenrollment would rise by less. These increases may be seriously biased downwards by the

use of relative rather than actual youth wages (since falling youth and adult wages would show no effect).

⁶Some disagreement remains over whether wage growth (as opposed to levels) for the "Baby-Boomers" will allow their wages to converge over time to more normal levels, relative to other cohorts. Welch (1979) and Bloom and Freeman (1986) argue that they will while Berger (1985) argues against this view.

⁷The rather lengthy literature on "deindustrialization" began with Bluestone and Harrison (1983) and was disputed by Lawrence (1984). On the related issue of growing inequality in earnings and family income see Bell and Freeman (1985), Blackburn and Bloom (1985), and Montgomery and Stockton (1987).

⁸According to Brown et al., the elasticity of labor demand for teens with respect to the minimum wage is .1-.2, implying only a small tradeoff between higher minimum wages and employment levels of youth. Montgomery also shows that the negative effects of unions on employment are not large in magnitude.

⁹Median income by race for year-round, full-time workers is not available for all years. Looking at all workers' income would exaggerate the decline in wages for black males, given the dramatic decline in their employment levels over this period.

¹⁰The argument that recent declines in black youth employment reflect a mismatch of jobs and worker skills caused by declining manufacturing employment is stated in Kasarda (1986) and Wilson (1987).

¹¹While government anti-discrimination activity should have shifted out labor demand for blacks, thereby raising both wages and employment,

it is possible that they have raised wages of blacks at the expense of employment. A more plausible argument is that labor demand has risen for some blacks (i.e., those with education and skills) and declined for others (for reasons discussed in the text).

¹²The view that black male unemployment is responsible for low marital rates and high female headship among black households is disputed by Bassi (1987), among others.

¹³The literature on employee job search focuses on unemployment rather than participation. See Mortensen (1986) for a review of this literature.

¹⁴The argument that relative reservation wages are higher for blacks is disputed by Borus (1982), though he presents no data on market wages. Various Manpower Development Research Corporation (MDRC) publications also dispute this viewpoint on the basis of the ease with which minimum wage jobs in government programs are filled. This, however, does not contradict the notion that large segments of the black and white youth populations are unwilling to accept these jobs.

¹⁵Proposals for a voucher system in which young people would be able to purchase the remedial education or training of their choices appear, for example, in Haveman (1988). A few states, such as Michigan, are initiating comprehensive programs designed to evaluate and identify particular skill deficiencies of individual adults in the population and to direct them to appropriate remedial services. Apprenticeship programs, in which youth are trained for specific skills at low wages, have never been widely used outside of unionized construction, though

government subsidies for such programs more generally might be considered.

¹⁶Programs which aid disadvantaged workers in the job search process have recently been included in many statewide programs for AFDC recipients (Gueron (1986)), though their specific effects have not been frequently evaluated.

¹⁷Even the general direction of policies to achieve such a goal are unclear. For instance, the apparently growing importance of the high-price, illegal drug traffic has led some public officials to argue for legalization rather than stricter law enforcement. I defer to others with greater expertise in these matters.

REFERENCES

- Anderson, Elijah. "Some Observations on Black Youth Unemployment," in J. Palmer and I. Sawhill eds. Youth Employment and Public Policy, Prentice Hall, 1980.
- Bell, Linda and Richard Freeman. "The Facts About Rising Industrial Wage Dispersion in the U.S." IRRA Proceedings, 1986.
- Ballen, John and Richard Freeman. "Transitions between Employment and Unemployment," in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, University of Chicago Press, 1986.
- Bassi, Laurie. "Changing Family Structure: Economic Choice or Economic Constraint?" Mimeo, 1987.
- Bassi, Laurie. "The Effect of CETA on the Post-Program Earning of Participants, Journal of Human Resources, Fall 1983.
- Bound, John and Richard Freeman. "Black Economic Progress: Erosion of the Post-1964 Gains in the 1980's?" Mimeo, 1987.
- Beach, Charles. "The Vanishing Middle Class? Evidence and Explanations," Institute for Research on Poverty Discussion Paper, 1988.
- Berger, Mark, "Changes in Labor Force Composition and Male Earnings: A Production Approach," Journal of Human Resources, Spring 1983.
- Berger, Mark. "The Effect of Cohort Size on Earnings Growth: A Reexamination of the Evidence," Journal of Political Economy, June 1985.
- Bishop, John. "Employment in Construction and Distribution Industries: The Impact of the New Jobs Tax Credit," in S. Rosen ed. Studies in Labor Markets, University of Chicago Press, 1981.

- Bishop, John and Robert Haveman. "Selective Employment Subsidies: Can Okun's Law be Repealed?" American Economic Review, May 1979.
- Blackburn, McKinley and David Bloom. "Family Income Inequality in the United States: 1967-1984." IRRA Proceedings, 1986.
- Bloom, David and Richard Freeman. "The Youth Problem: Age or Generational Crowding?" NBER Working Paper, 1986.
- Bluestone, Barry and Bennett Harrison. The De-Industrialization of America, 1983.
- Borjas, George. "The Demographic Determinants of the Demand for Black Labor," in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.
- Borus, Michael. "Willingness of Youth to Work," Journal of Human Resources, 1982.
- Bound, John and George Johnson. "Changes in the Structure of Wages During the 1980's: An Evaluation of Alternative Explanations," Unpublished, 1989.
- Bowen, William and T. Aldrich Finegan. The Economics of Labor Force Participation, Princeton University Press, 1969.
- Brown, Charles et al. "The Effect of the Minimum Wage on Employment and Unemployment," Journal of Economic Literature, June 1982.
- Burtless, Gary. "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment," Industrial and Labor Relations Review, October 1985.
- Cain, Glen. "Black-White Differences in Employment of Young People: An Analysis of 1980 Census Data," Institute for Research on Poverty Discussion Paper, 1989.

- Cain, Glen and Ross Finnie. "The Black-White Difference in Youth Employment: Evidence for Demand-Side Factors," IRP Discussion Paper, 1987.
- Clark, Kim and Lawrence Summers. "The Dynamics of Unemployment Reconsidered," Brookings Papers on Economic Activity, 1979.
- Clark, Kim and Lawrence Summers. "Demographic Differences in Cyclical Employment Variation," Journal of Human Resources, Winter 1981.
- Cogan, John. "The Decline in Black Teenage Employment: 1950-70," American Economic Review, September 1982.
- Datcher-Loury, Linda and Glen Loury. "The Effects of Attitudes and Aspirations on the Labor Supply of Young Men," in Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.
- Dooley, Martin and Peter Gottschalk. "Earnings Inequality Among Males in the United States: Trends and the Effects of Labor Force Growth," Journal of Political Economy, February 1984.
- Ehrenberg, Ronald and Alan Marcus. "Minimum Wages and Teenagers' Enrollment and Employment," Journal of Human Resources, Winter 1982.
- Ellwood, David. "Teenage Unemployment: Permanent Scars on Temporary Blemishes?" in R. Freeman and D. Wise eds. The Youth Labor Market Problem, University of Chicago Press, 1982.
- Ellwood, David. "The Spatial Mismatch Hypothesis: Are There Jobs Missing in the Ghetto?" in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.

- Ellwood, David and Martin Feldstein. "Teenage Unemployment: What is the Problem?" In R. Freeman and D. Wise eds. The Youth Labor Market Problem, 1982.
- Ellwood, David and David Wise. "Youth Employment in the Seventies: The Changing Circumstances of Young Adults," NBER Working Paper, 1983.
- Freeman, Richard. The Market for College-Trained Manpower, Harvard University Press, 1971.
- Freeman, Richard. "The Decline in Economic Rewards to College Education," Review of Economics and Statistics, February 1977.
- Freeman, Richard. "The Effects of Demographic Factors on Age-Earnings Profiles," Journal of Human Resources, Summer 1979.
- Freeman, Richard. "Black Economic Progress Since 1964: Who Has Gained and Why," in S. Rosen ed. Studies in Labor Markets, University of Chicago Press, 1981.
- Freeman, Richard. "Economic Determinants of Individual and Geographic Variation in the Labor Market Positions of Young Persons," in R. Freeman and D. Wise eds., The Youth Labor Market Problem, 1982.
- Freeman, Richard. "Crime and the Labor Market," in J.Q. Wilson ed. Crime and Public Policy, Institute for Contemporary Studies, 1983.
- Freeman, Richard. "Who Escapes? The Relation of Church-Going and Other Background Factors to the Performance of Black Male Youths," in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.
- Freeman, Richard. "How do Young, Less-Educated Workers Fare in a Labor Shortage Economy?" Mimeo, 1988.

- Ferguson, Ronald and Randall Filer. "Do Better Jobs Make Better Workers? Absenteeism for Work Among Inner-City Black Youths," in R. Freeman and H. Holzer eds., The Black Youth Employment Crisis, 1986.
- Grant, James and Daniel Hamermesh. "Labor Market Competition Among Youths, Women and Others," Review of Economics and Statistics, 1981.
- Gueron, Judith. "Lessons From a Job Guarantee: The Youth Incentive Entitlement Pilot Projects," Manpower Development Research Corporation, 1984.
- Gueron, Judith. "Work Initiatives for Welfare Recipients," Manpower Development Research Corporation, 1986.
- Gustman, Alan and Thomas Steinmeier. "Wages, Unemployment, and the Enrollments of Youth," Review of Economics and Statistics, November 1981.
- Haveman, Robert. Starting Even, Twentieth Century Fund, 1986.
- Hamermesh, Daniel. "Subsidies for Jobs in the Private Sector," in J. Palmer ed. Creating Jobs, Brookings, 1978.
- Holzer, Harry. "Black Youth Unemployment: Duration and Job Search," in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986a.
- Holzer, Harry. "Informal Job Search and Black Youth Unemployment," American Economic Review, June 1987.
- Holzer, Harry. "Reservation Wages and Their Labor Market Effects for Black and White Male Youth," Journal of Human Resources, June 1986b.

- Holzer, Harry. "Unions and the Labor Market Status of White and Minority Youth," Industrial and Labor Relations Review, April 1982.
- Ihlanfeldt, Keith and David Sjoquist. "Job Accessibility and Racial Differences in Youth Employment Rates," Unpublished, 1989.
- Jackson, Peter and Edward Montgomery. "Layoffs, Discharges, and Youth Unemployment," in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.
- Jencks, Christopher. "Deadly Neighborhoods," The New Republic, June 13, 1988.
- Kasarda, John. "The Regional and Urban Redistribution of People and Jobs in the U.S." Mimeo, 1986.
- Kim, Choongsoo. "On the Determinants of Reservation Wages: An Empirical Specification," Center for Human Resource Research, Ohio State University, 1981.
- Lawrence, Robert. Can America Compete? Brookings, 1984.
- Lerman, Robert. "Do Welfare Programs Affect Schooling and Work Patterns of Young Black Men?" in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.
- Leonard, Jonathan. "The Impact of Affirmative Action on Employment," Journal of Labor Economics, October 1984.
- Leonard, Jonathan. "Space, Time, and Unemployment: Los Angeles, 1980," Mimeo, 1985.
- Levy, Frank. Dollars and Dreams, Russell Sage Foundation, 1987.
- Mare, Robert and Christopher Winship. "Racial Socioeconomic Convergence and the Paradox of Black Youth Joblessness," NORC, 1983.

- Mattila, J. Peter. "Youth Labor Markets, Enrollment, and Minimum Wages," IRRA Proceedings, 1978.
- McElroy, Marjorie. "The Joint Deterioration of Household Membership, and Market Work: The Case of Young Men," Journal of Labor Economics, July 1985.
- Meyer, Robert and David Wise. "High School Preparation and Early Labor Market Experience," in R. Freeman and D. Wise eds. The Youth Labor Market Problem, 1982a.
- Meyer, Robert and David Wise. "The Transition for School to Work: The Experiences of Blacks and Whites," NBER Working Paper, 1982b.
- Montgomery, Edward. "Employment and Unemployment Effects of Unions," Journal of Labor Economics, April 1989.
- Montgomery, Edward and David Stockton. "Evidence on the Causes of Rising Dispersion of Relative Wages," Mimeo, 1987.
- Mortensen, Dale. "Job Search and Labor Market Analysis," in O. Ashenfelter and R. Layard eds. Handbook of Labor Economics, North Holland, 1986.
- Murphy, Kevin and Finis Welch. "The Structure of Wages," UNICON Discussion Paper, 1988.
- Peloff, Jeffrey and Michael Wachter. "The New Jobs Tax Credit: An Evaluation of the 1977-78 Wage Subsidy Program," American Economic Review, May 1979.
- Rees, Albert and Wayne Gray. "Family Effects in Youth Employment," in R. Freeman and D. Wise eds. The Youth Labor Market Problem, 1982.
- Sipe, Cynthia et al. "Summer Training and Education Program: Report on the 1987 Experience," Public/Private Ventures, 1988.

- Smith, James and Finis Welch. Closing the Gap, 1987.
- Stapleton, David and Douglas Young. "Educational Attainment and Cohort Size," Journal of Labor Economics, July 1988.
- Viscusi, W. Kip. "Market Incentives for Criminal Behavior Among Inner-City Black Youth," in R. Freeman and H. Holzer eds. The Black Youth Employment Crisis, 1986.
- Wachter, Michael and Choongsoo Kim. "Time-Series Changes in Unemployment of Teenagers," in R. Freeman and D. Wise eds. The Youth Labor Market Problem, 1982.
- Welch, Finis. "Effects of Cohort Size on Earnings: The Baby-Boom Babies' Financial Bust," Journal of Political Economy, 1979.
- Welch, Finis. "The Employment of Black Men," Journal of Labor Economics, forthcoming in 1989.
- Williams, Donald. Labor Force Participation of White and Black Male Youth, UMI Press, 1984.
- Wilson, William. The Truly Disadvantaged, Prentice-Hall, 1986.